

Health Alert Network Message 22-33: Update on Ebola Virus Disease Outbreak in Central Uganda

Origination Date: *October 10, 2022*

Revision Dates (List All Revision Dates):

Louisiana Department of Health Update: Outbreak of Ebola virus disease (Sudan ebolavirus) in Central Uganda

Summary

The Centers for Disease Control and Prevention (CDC) and the Louisiana Department of Health are issuing this Health Alert Network (HAN) Health Advisory about a recently confirmed outbreak of Ebola virus disease (EVD) in Uganda caused by Sudan virus (species *Sudan ebolavirus*) to summarize recommendations for clinicians, case identification and testing, and clinical laboratory biosafety considerations. No suspected, probable, or confirmed EVD cases related to this outbreak have yet been reported in the United States. However, as a precaution and to remind clinicians about best practices, LDH is issuing this update to raise awareness of this outbreak.

Background

On September 20, 2022, the Ministry of Health of Uganda officially declared an outbreak of EVD due to Sudan virus (species *Sudan ebolavirus*) in Mubende District, Central Uganda. As of October 6, 2022, a total of 44 confirmed cases, 10 confirmed deaths, and 20 probable deaths of EVD have been identified in Uganda. CDC is working closely with the Ministry of Health of Uganda, the World Health Organization (WHO), and other partners to support the response to this outbreak.

This is the fifth outbreak of EVD caused by Sudan virus in Uganda since 2000. The current outbreak is in the same area as Uganda's most recent EVD outbreak caused by Sudan virus, which occurred in 2012. During the 2012 outbreak, limited secondary transmission was reported, and the outbreak was effectively contained.

As of October 6, 2022, no suspected, probable, or confirmed EVD cases related to this outbreak have been reported in the United States or other countries outside of Uganda. The geographic scope of this outbreak in Uganda is currently limited to five districts in central Uganda and not the capital Kampala or the travel hub of Entebbe. While there are no direct flights from Uganda to the United States, travelers from or passing through affected areas in Uganda can enter the United States on flights connecting from other countries.

Starting the week of October 10, 2022, CDC and Department of Homeland Security will implement funneling of U.S.-bound air passengers who have been to Uganda in the prior 21 days. These passengers will fly into 5 U.S. airports where they will undergo entry health screenings. LDH epidemiologists will follow-up with air travelers from Uganda with a Louisiana destination, conducting health assessments, providing additional information, and doing check ins with the travelers.

It is important for clinicians to obtain a detailed travel history from patients with suspected EVD, especially those that have been in affected areas of Uganda. Early consideration of EVD in the differential diagnosis is important for providing appropriate and prompt patient care, diagnostics, and to prevent the spread of infection. Healthcare providers should be alert for and evaluate any patients suspected of having EVD, particularly among people who have recently traveled to affected areas in Uganda.

Ebola Virus Disease

A person infected with EVD is not contagious until <u>symptoms</u> appear (including fever, headache, muscle and joint pain, fatigue, loss of appetite, gastrointestinal symptoms, and unexplained bleeding). Sudan virus is spread through direct contact (through broken skin or mucous membranes) with the body fluids (blood, urine, feces, saliva, droplet, or other secretions) of a person who is sick with or has died from EVD, infected animals, or with objects like needles that are contaminated with the virus. EVD is not spread through airborne transmission.

There is currently no FDA-licensed vaccine to protect against Sudan virus infection. The Ebola vaccine licensed in the United States (<u>ERVEBO®</u>) is indicated for viruses in the *Ebolavirus* genus (species Zaire ebolavirus), and based on studies in animals, it is not expected to protect against Sudan virus or other viruses in the Ebolavirus genus. Also, there is currently no FDA-approved treatment for Sudan virus.

In the absence of early diagnosis and appropriate supportive care, EVD is a disease with a high mortality rate; occasional outbreaks have occurred mostly on the African continent. With intense supportive care and fluid replacement, mortality rates may be lowered. The genus *Ebolavirus* is comprised of six species,

but only four (Ebola, Sudan, Taï Forest, and Bundibugyo viruses) are known to cause EVD in humans. Infection with any Ebola species presents as clinically similar disease. Previous outbreaks of Sudan virus have had a mortality rate of approximately 50%.

Recommendations for Clinicians

Clinicians who evaluate patients with clinical symptoms such as fever, headache, muscle and joint pain, fatigue, loss of appetite, gastrointestinal symptoms, and unexplained bleeding should suspect possible VHF or EVD on the differential diagnosis and clinicians should be prompted to immediately take a travel history. Healthcare providers should be alert for and evaluate any patients suspected of having VHF or EVD, particularly among people who have recently traveled to affected areas in Uganda, and place in a private room while performing clinical evaluation. If performing an aerosol generating procedure, conduct in an Airborne Infection Isolation Room (AIIR) when feasible. Testing for diseases in returning travelers which may present similarly to EVD, such as malaria, should be considered, but clinical consultation should be pursued if there is still a high index of suspicion for EVD.

Louisiana clinicians with concerns about a patient with suspected EVD should immediately contact the Infectious Disease Epidemiology (IDEpi) 24/7 clinician hotline: 800-256-2748.

Early recognition and identification of a suspected EVD <u>patient under investigation (PUI)</u> is critical. If a diagnosis of EVD is considered, clinical teams should coordinate with <u>LDH</u> and CDC to ensure appropriate precautions are taken to help prevent potential spread of EVD.

As a resource for public health departments, CDC's Viral Special Pathogens Branch (VSPB) is available 24/7 for consultations regarding suspected VHF or EVD cases by calling the CDC Emergency Operations Center at 770-488-7100 and requesting VSPB's on-call epidemiologist, or by e-mailing spather@cdc.gov.

Healthcare personnel can be exposed to Ebola virus by touching a patient's body fluids, contaminated medical supplies and equipment, or contaminated environmental surfaces. Splashes to unprotected mucous membranes (for example, the eyes, nose, or mouth) are particularly hazardous. Procedures that can increase environmental contamination with infectious material or create aerosols should be minimized. CDC recommends a combination of measures to prevent transmission of EVD in hospitals including PPE.

Eight laboratories within the <u>Laboratory Response Network (LRN)</u> are able to test using the <u>Biofire FilmArray NGDS Warrior Panel</u>, with more LRN laboratories working toward the ability to test. The Warrior Panel can detect Ebola, Sudan, Tai Forest, Bundibugyo, and Reston viruses.

Clinical and Laboratory Biosafety Considerations

All personnel handling specimens from patients with suspected EVD (especially patients with travel history to Uganda three weeks before symptom onset) should adhere to recommended infection control practices to prevent infection and transmission among laboratory personnel. As a component of the Occupational Safety and Health Administration's (OSHA's) Bloodborne Pathogens Standard, laboratories handling blood and body fluids must have an Exposure Control Plan in place to eliminate or minimize employees' risk of exposure to pathogens. Laboratories should conduct extensive risk assessments to identify and mitigate hazards associated with handling Ebola specimens to create the safest environment.

The <u>proper PPE</u> needs to be identified, available, and staff trained to properly don and doff their PPE. Staff need to be specially trained, have passed <u>competency testing</u>, and attended drills to safely receive, handle, and process these specimens. A laboratory should have dedicated space, equipment for handling and testing specimens from ill patients, and plans for minimizing specimen manipulation. A <u>waste management plan</u> needs to be in place for lab reagents and Category A waste, including PPE and sample material. If a facility does not have the appropriate risk mitigation capabilities, then the specimen should be forwarded to another facility that does.

For More Information

General Ebola Information

General Resources for Ebola Virus Disease

Clinician Resources

- Ebola Virus Disease Information for Clinicians in S. Healthcare Settings
- Screening Patients for Ebola Virus Disease
- Considerations for Discharging People Under Investigation (PUIs) for Ebola Virus Disease

Infection Prevention Resources

- Interim Guidance for S. Hospital Preparedness for Patients Under Investigation (PUIs) or with Confirmed Ebola Virus Disease
- Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) in U.S. Hospitals
- Personal Protective Equipment (PPE) | Public Health Planners | Ebola (Ebola Virus Disease) |
 CDC Cleaning and disinfecting
- Interim Guidance for Environmental Infection Control in Hospitals for Ebola Virus
- Procedures for Safe Handling and Management of Ebola-Associated Waste